

Page 5

Docket No.: 881075/3

registering information pertaining to the status of said detection means.

22. (Amended) A method for monitoring the integrity of a detection means associated with a target network of computers and configured to detect an attack on said network of computers comprising the steps of:

correlating events across a plurality of devices associated with said target network using said detection means;

establishing a secure link for the transfer of data between said detection means and a master system hierarchically independent from said detection means;

monitoring the status of said detection means through said secure link; and

registering information pertaining to the status of said detection means.

REMARKS

Applicants wish to thank the Examiner for the detailed and productive discussion of the application and its claims during the personal interview on March 12, 2003.

Receipt is acknowledged of the Final Office Action of December 26, 2002.

Claims 1-22 are currently pending in the application. Claims 1-22 have been rejected in the Final Office Action. Applicants amended Claims 1, 5, 8, 11, 13, 17, 21 and 22 to more particularly claim the subject matter of the invention. No new matter has been added. Favorable reconsideration of this application as amended is respectfully requested.

In the Final Office Action, Claims 1, 3-7, 9-11, 13-15, 17-19 and 21-22 were rejected under 35 U.S.C. §103(a), as being unpatentable over Emigh in view of Violino and Netwon Telecom Dictionary. Applicants have amended the claims and believe the claims, as amended, define patentable subject matter as discussed further below.

9406335.1

Page 6

Docket No.: 881075/3

As discussed during the interview with the Examiner and claimed in amended independent Claims 1, 5, 8, 11, 13, 17, 21 and 22 of the present Application, the present invention relates to a method and apparatus for monitoring the integrity and security of a computer network. The security system of the present invention monitors the integrity of an individual computer connected to a target network and/or the entire target network by having at least one security subsystem. The security subsystem is located on the network and is configured to correlate all event messages generated across various devices of the target network of computers. By correlating all events on these network devices, the subsystem detects attacks on various network devices regardless of where these devices are located on the network. Thus, it detects attacks on individual computers and the entire network. A master security system monitors the security subsystem through a secure link and registers information pertaining to attacks detected by the security subsystem.

In contrast, the NetRanger product disclosed in the cited Emigh reference implements intrusion detection technology. NetRangers passively capture information from devices associated with them on a computer network and convey this information to the Network Security Operations Center. Thus, Emigh does not disclose a security subsystem or detection means configured to correlate events across a plurality of devices associated with the target network. Likewise, Emigh does not teach correlating events across a plurality of devices associated with the target network using the security subsystem or the detection means. Instead, Emigh teaches an intrusion detection device equivalent to the network IDS 18, shown in Fig. 18 of the present application. Moreover, none of the other references cited by the Examiner discloses a security system having a security subsystem or detection means configured to correlate events across a plurality of devices associated with the target network, or a method for

9406335.1

Page 7

Docket No.: 881075/3

monitoring the integrity of the detection means or subsystem by, inter alia, correlating events across a plurality of devices associated with the target network.

As the Examiner and the Attorney of record have discussed in an after-interview telephone conversation, the limitation of the security subsystem or detection means being "configured to correlate events across a plurality of devices associated with said target network " (Claims 1, 5, 8, 13 and 17) and the limitation of " correlating events across a plurality of devices associated with said target network using said " security subsystem or detection means (Claims 11, 21 and 22) are not met by the prior art of record.

Presently amended Claims 1, 5, 8, 11, 13, 17, 21 and 22 are believed to be patentable over the cited prior art. Applicants respectfully submit that dependent Claims 2-4, 6, 7, 9, 10, 12, 14-16, and 18-20 are likewise believed to define patentable subject matter in view of their dependency upon allowable Claims 1, 5, 8, 11, 13 or 17 and, further, on their own merits.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version With Markings to Show Changes Made."

It is respectfully submitted that Claims 1-22, as presented, patentably define over the prior art of record. Accordingly, this Application is believed to be in a condition for allowance. Prompt and favorable action is earnestly solicited and believed to be fully warranted.

Respectfully submitted,
Schulte Roth & Zabel LLP
Attorneys for Applicant
919 Third Avenue
New York, NY 10022
(212)756-2000

Dated: March 26, 2003

By Anna Vishev
Anna Vishev
Reg. No. 45,018

9406335.1

Page 8

Docket No.: 881075/3

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A security system for a computer connected to a network of computers comprising:

at least one security subsystem associated with said computer, said subsystem being configured to [monitor] correlate events across a plurality of devices associated with said network of computers [in its entirety] and to detect attacks on said computer;

and a secure link between said security subsystem and a master system enabling data communication therebetween; wherein

said master system monitors said security subsystem through said secure link and registers information pertaining to attacks detected by said security subsystem.

5. (Amended) A network security system for a target network of computers comprising:

at least one security subsystem associated with said target network, said subsystem being configured to [monitor] correlate events across a plurality of devices associated with said target network of computers [in its entirety] and to detect attacks on said network; and

a secure link between said security subsystem and a master system enabling data communication therebetween; wherein

said master system monitors said security subsystem through said secure link and registers information pertaining to the attacks detected by said security subsystem.

9406335.1

Page 9

Docket No.: 881075/3

8. (Amended) A network security system for a target network of computers comprising:
at least one security subsystem associated with said target network and configured to
[monitor] correlate events across a plurality of devices associated with said target network [in its
entirety] and to detect and register attacks on said target network;

a secure link for data communication between said security subsystem and said master
system; and

testing means associated with said master system for generating pseudo-attacks on said
target network initiated by said master system and detectable by said security subsystem;
wherein

said master system monitors said security subsystem through said secure link by
comparing the pseudo-attacks generated by said testing means to the detected attacks registered
by said security subsystem.

11 (Amended) A method for monitoring the integrity of a security subsystem associated
with a target network of computers and configured to detect attacks on said network of
computers comprising:

[monitoring] correlating events across a plurality of devices associated with said target
network [in its entirety] using said security subsystem;

establishing a secure link for the transfer of data between said security subsystem and a
master system hierarchically independent from said security subsystem;

monitoring the status of said security subsystem through said secure link; and

registering information pertaining to the status of said security subsystem.

9406335.1

Page 10

Docket No.: 881075/3

13. (Amended) A security system for a computer connected to a computer network comprising:

at least one detection means associated with said computer, said detection means being configured to [monitor] correlate events across a plurality of devices associated with said computer network [in its entirety] and to detect an attack on said computer;

a master security system located outside said computer network; and

a secure link between said detection means and said master security system enabling data communication therebetween; wherein

said master security system monitors said detection means through said secure link and registers information pertaining to attacks detected by said detection means.

17. (Amended) A network security system for a target network of computers comprising:

at least one detection means associated with said target network, said detection means being configured to [monitor] correlate events across a plurality of devices associated with said computer network [in its entirety] and to detect an attack on said network;

a master security system located outside said network; and

a secure link between said detection means and said master security system enabling data communication therebetween; wherein

said master security system monitors said detection means through said secure link and registers information pertaining to attacks detected by said detection means.

9406335.1

Page 11

Docket No.: 881075/3

21. (Amended) A method for monitoring the integrity of a detection means associated with a computer, said computer being connected to a computer network, and configured to detect an attack on said computer, said method comprising the steps of:

[monitoring] correlating events across a plurality of devices associated with said [target] computer network [in its entirety] using said detection means;

establishing a secure link for the transfer of data between said detection means and a master system hierarchically independent from said detection means;

monitoring the status of said detection means through said secure link; and

registering information pertaining to the status of said detection means.

22. (Amended) A method for monitoring the integrity of a detection means associated with a target network of computers and configured to detect an attack on said network of computers comprising the steps of:

[monitoring] correlating events across a plurality of devices associated with said target network [in its entirety] using said detection means;

establishing a secure link for the transfer of data between said detection means and a master system hierarchically independent from said detection means;

monitoring the status of said detection means through said secure link; and

registering information pertaining to the status of said detection means.

9406335.1